

# **Transforming the Combat Training Centers**

**A Monograph  
by  
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## Abstract

TRANSFORMING THE COMBAT TRAINING CENTERS by MAJ Joseph S. McLamb, US Army, 51 pages.

This study examines four potential courses of action for transforming the Combat Training Centers (CTCs) to provide adequate training for the Objective Force. The Combat Training Centers examined in this study (the National Training Center at Fort Irwin California; the Joint Readiness Training Center at Fort Polk, Louisiana; and the Combat Maneuver Training Center in Germany) represent the Army's premiere training facilities for live battlefield simulations at the battalion and brigade levels, and may require significant changes to serve the Objective Force with the same level of training which the Legacy Force has enjoyed over the past two decades. The study evaluates each of four courses of action using three primary criteria derived from the *Army Transformation Campaign Plan* and associated subordinate Army documents. The courses of action examined include broadening the training centers' mission set to incorporate stability and support operations, expanding the training centers' charter to include the execution of company and platoon lane training, the incorporation of the training centers into a larger joint training facility, and the more radical idea of modifying the training centers to focus on expeditionary operations. The study evaluates each of these courses of action in terms of the degree to which each trains the Objective Force in rapid deployment, rapid transitions between types of operations, the employment of *ad hoc* organizations, and operations against an adaptive opponent. The evaluation resulted in five major findings, presented as recommendations in the conclusion of the paper, to include: 1) the CTCs should modify their training method to focus on the rapid deployment of the training unit directly to the training environment; 2) CTC rotations should take place as part of a larger joint exercise, even if the rest of the exercise involves only virtual or constructive simulations; 3) units should rotate to a CTC just prior to assuming a deployable status, following a period of progressive training; 4) CTC rotations should fully integrate stability and support operations into each rotation; 5) CTCs should be flexible enough to rapidly modify their Opposing Force to replicate emerging threats in anticipated contingencies. The study further concludes that, while some steps in the right direction are already underway, much remains to be done before the Objective Force arrives.

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## CHAPTER ONE

# INTRODUCTION

*The CTC Program is the Army's premier training and leader development experience.<sup>1</sup>*

Twenty years after the creation of the National Training Center (NTC), the time has come for the U.S. Army to reassess and refine the role of one of its most successful training concepts of the twentieth century, the combat training centers (CTCs). Beginning in 1981 with the first battalion rotation through the NTC at Fort Irwin, California, the CTCs have provided the U.S. Army with unmatched live simulation training at the battalion and brigade levels, creating a training environment intentionally designed to look as close to real combat as possible.<sup>2</sup> Given the official praise the CTCs have earned over the past two decades, typified by the above statement taken from the U.S. Army's capstone training manual, any call for change is likely to encounter significant resistance from those who argue there is no need to fix what is not broken. Frankly, the CTCs are not broken. But the world in which they operate has changed drastically since 1982, and is likely to undergo change of at least the same magnitude in the next twenty years. If the CTCs of tomorrow are to prove as effective as those of today, the U.S. Army must recognize the changing environment and modify the CTCs to match the new and emerging reality.

### WHY CHANGE THE CTCs?

The changes that challenge the future success of the CTCs stem from both the external and internal environment of the Army. Externally, the security environment looks much different than it did in 1982, and the range of likely missions which political decision-makers might call on the Army to complete has expanded greatly. These external changes have, in large measure,

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<sup>1</sup> U.S. Army, *Field Manual 7-0, Training the Force* (Washington, D.C.: Headquarters, Department of the Army, 21 October, 2002): 1-11.

<sup>2</sup> Anne W. Chapman, *The Army's Training Revolution, 1973-1990: An Overview* (Fort Monroe, Virginia: United States Army Training and Doctrine Command, 1994), 19.

driven significant internal changes. Within the Army, the progressive unit training system which characterized training in the 1980s and gained institutional approval in the 1990 field manual *Battle Focused Training* is rarely seen within tactical units today, typically falling casualty to increased operational tempo and deployment requirements.<sup>3</sup> What remains of the old training system is further disrupted by requirements to train tasks not on unit Mission Essential Task Lists (METLs) but necessary for specific deployments for stability and support operations. The publication of FM 7-0, *Training the Force*, in October, 2002, represents the Army's attempt to reconcile its Cold War training program with the changing environment, but falls short of fully doing so by recognizing the challenges of the current training environment without offering an significant insights into how units can overcome those challenges. Moreover, the changes to the Army's *de facto* training system are relatively minor when compared to the change in the vision of the Army captured in the Army Transformation Campaign Plan. Taken collectively, these changes to the external and internal environment of the Army offer a solid argument in favor of a review of the role and methodology of the CTCs for the next two decades. A more detailed examination of these changes makes the need for review more apparent.

Since the changes to the external environment may to some degree be considered the source of many of the internal changes, a structured investigation should begin with the external environment. Few would argue the security environment of today resembles that of 1982. Since 1982, the most likely threats to US security and the range of missions for which political decision-makers have employed military power have seen unprecedented change. To some degree, one may view the latter as a consequence of the former.

In 1982, conventional wisdom held the Soviet Union to be the most likely, perhaps the inevitable, enemy of the United States. The Army knew this as well, and when the first battalion

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<sup>3</sup> As early as 1995, a War College paper written by former observer/controllers remarked that "there has been a drastic decline in the level of proficiency a unit brings to the CTCs" and specifically blamed "an ever-increasing OPTEMPO that saps training time and resources" for the trend.

rotated through the NTC it fought an enemy “schooled in Warsaw Pact doctrine, tactics, and strategy.”<sup>4</sup> When the Soviet Union dissolved in the early 1990s, the United States Army lost not only its most likely enemy but the model opponent for its training program and the focus for Army planning. The Army designed the NTC to train units for large scale conventional warfare against Warsaw Pact forces in Europe.<sup>5</sup> The demise of the Soviet Union made such operations significantly less likely, although not impossible. This change in the security environment enabled, if it did not directly cause, a subsequent change in the mission profile of the Army.

With the Soviet Union no longer a probable conventional threat, the early 1990s found the United States in an unusual predicament. While nations frequently find their military resources hard pressed to meet their security needs, the United States in the early 1990s possessed more military capability than most policy-makers could envision needing or wanting. Although the reduction of the military force structure served as the most obvious result of this mismatch in means and ends, the more important change for the purposes of this discussion came from the perception of excess military capability on the part of political decision-makers. The last decade of the twentieth century saw the Army tasked with a great number of missions outside the large-scale, conventional battlefield for which it had trained. Political decision-makers became increasingly comfortable with assigning stability and support missions to the Army, particularly as the threat of conventional conflict appeared to continue to diminish. By the beginning of the twenty-first century, the Warsaw Pact, conventional force scenario of NTC in 1982 seemed largely irrelevant to what the Army actually found itself doing. The security environment and mission profile the Army designed the NTC to replicate no longer existed. They are unlikely to return in the next twenty years.

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<sup>4</sup> Anne W. Chapman, *The Origins and Development of the National Training Center, 1976-1984* (Fort Monroe, Virginia: United States Army Training and Doctrine Command, 1994), 1.

<sup>5</sup> Ibid.

The changes to the external environment of the Army to some degree created the most significant internal changes. The fall of the Soviet Union and the subsequent expansion in the Army's mission profile led to changes in the Army's progressive training system, increasing training requirements for non-METL tasks, and, arguably, the development of Army Transformation as a vision for the future. Each of these changes, in turn, makes a review of the CTCs vital for the Army of tomorrow.

In 1990, Army trainers viewed a CTC rotation as something of a capstone training event for combat units. Before rotating to a CTC, "units must already know how to alert, deploy, and fight as a combined arms team" warned the Army's training doctrine.<sup>6</sup> The Army's model for achieving this aim rested on a "band of excellence" maintained through a progressive approach to training starting at the lower echelons, such as squad and section, and building up to higher echelon collective training at home station, and culminating with a rotation at a CTC.<sup>7</sup> In the 1980s, units frequently followed a training program not far removed from this Army ideal. By the turn of the century, however, reality had moved well outside the vision in *Battle Focused Training*. The increase in the mission profile of the Army led directly to more operational deployments for combat units, and the ability of any unit to pursue a progressive training program in preparation for a CTC rotation consequently decreased. Rather than coming at the end of an extensive period of squad, platoon, company, battalion, and brigade training, a contemporary CTC rotation may fall essentially anywhere in a unit's training cycle. This change in the internal environment has, indeed, given rise to calls for drastic changes to how CTCs conduct training.<sup>8</sup>

A second change to the internal environment of the Army, again growing out of changes to the external environment, also led to calls for reforms at the CTCs. While Army training doctrine

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<sup>6</sup> U.S. Army, *Field Manual 25-101, Battle Focused Training* (Washington, D.C.: Headquarters, Department of the Army, 1988), D-2.

<sup>7</sup> *Ibid.*, 1-7.

<sup>8</sup> Lieutenant Colonel Ronald L. Bertha, "The Future of the Combat Training Centers to Meet the National Military Strategy" (Thesis, United States Army War College, 1999), 2.



focuses combat units on those missions they will most likely perform in war, by the 1990s more and more commanders found their units performing tasks other than those on their METLs. The expansion of the Army's mission profile not only required units to deploy more frequently, but also required them to perform tasks for which they had not historically trained. While the Desert Storm experience of 1991 closely resembled the tactical environment of the CTCs, much of the Army's subsequent operational experience did not. Clearly, the internal environment of the Army, particularly in terms of its training requirements, has changed significantly.

Changes to the training cycle and a decreasing ability to focus exclusively on mission essential tasks pale in comparison to the third and most significant change to the Army's internal environment. With the publication of the Army Transformation Campaign Plan (ATCP), the Army formally embraced the expanded mission profile of the 1990s and set out to recreate itself as a force "dominant at every point on the spectrum of conflict."<sup>9</sup> In some sense the ATCP serves as a notification of the end of the Army which gave birth to the CTCs, and captures in a single document many of the changes to the environment which mandate the creation of a new Army. It describes a future Army which is fundamentally different from the one which first deployed to the NTC in 1982, and sets an aggressive timeline for producing the new Army in a few short years. In and of itself, the ATCP makes a review of the CTCs and their future role a necessary step in preparing the Army for future conflicts. With such a sweeping change in the Army's vision of itself, it seems unlikely that so important an aspect as the CTC program will not also require some modification.

While the ATCP captures in a single paper the most compelling reasons for reviewing the CTCs, it reflects the many changes to the external and internal environment of the Army since the CTCs began operations in 1982. Externally, the fall of the Soviet Union and the subsequent willingness of political decision-makers to employ Army forces for an expanding mission profile

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<sup>9</sup> U.S. Army, *United States Army Transformation Campaign Plan* (Washington, D.C.: Headquarters, Department of the Army, 2001), 4.

represent significant changes in the past two decades. Internally, the Army's cyclic, progressive training system and focus on mission essential tasks have become increasingly difficult to achieve in an era marked by increased operational deployments and stability and support tasks. These internal changes, significant in their own right, are amplified by the Army's acceptance of the need for radical change in its structure and doctrine as reflected in the ATCP. Taken collectively, these changes to the external and internal environment of the Army offer a solid argument for a review of the role and methodology of the CTCs for the next two decades.

## **THE RESEARCH QUESTION**

This study attempted to conduct such a review by examining the basic research question, "How should the Army remodel the Combat Training Centers within the next twenty years to support Army Transformation?" Three subordinate questions further refined the scope of the research.

- (1) Where should a CTC rotation fall in a unit's training cycle?
- (2) What training method(s) should the CTCs employ?
- (3) What training scenarios should the CTCs use?

In examining these questions, the study tested several potential courses of action for the future of the CTCs against a number of evaluation criteria derived primarily from the characteristics of the Objective Force identified in the ATCP and further refined in TRADOC Pamphlet 525-3-90/O&O. The courses of action grew, for the most part, out of recommendations for change at the CTCs made by authors both inside and outside the Army. The courses of action, as well as the evaluation criteria, are described in detail in Chapter Three.

## **LIMITATIONS AND DEFINITIONS**

From the beginning of the study, the need for a relatively narrow focus and the clear internal definition of some basic terms became clear. The author therefore chose to examine only the

three most similar CTCs within the study, and defined three basic terms for internal use throughout the development of the study.

The study considered only the “dirt” CTCs: the National Training Center (NTC), founded in 1981 at Fort Irwin, California; the Joint Readiness Training Center (JRTC), initially founded at Fort Chaffee, Arkansas in 1987, then moved to Fort Polk, Louisiana, in 1993; and the Combat Maneuver Training Center (CMTTC), founded in 1991 in Hohenfels, Germany. This intentional limitation reflected the author’s focus on ground maneuver operations at the brigade level and below and the primacy of live simulation at these facilities, and precluded consideration of the Battle Command Training Program (BCTP) and the concept of a new training center for deep operations.

Three terms required internal definition early in the study. Throughout the study, training sequence referred to the location of a CTC rotation within the larger training cycle. For example, a unit could attend a CTC rotation at the conclusion of a progressive period of home station unit training, at the conclusion of its deployment assumption training, or at a randomly selected point in its training cycle. Training method referred to a specific training technique, such as a situation training exercise or a command post exercise. Although the CTCs fame generally rested on a single training method, in fact they could and had employed several different methods. Training scenario referred to a notional situation used as the background to the training event. In the 1980s the standard training scenario centered around an invasion resembling the anticipated Soviet invasion in Europe. By the end of the 1990s, training scenarios portrayed a much broader set of potential employment of forces.

## **CONCLUSION**

Significant changes to the Army’s external environment and internal practices, together with the anticipated arrival of a new organization known as the Objective Force, make a review of the future roles and practices of the CTCs a matter of great importance to the Army in the opening

years of the twenty-first century. This study attempts to provide such a review through a disciplined examination of four potential courses of action for the future of the CTCs, evaluating each in terms of evaluation criteria derived from the official description of the Objective Force, and resulting in specific recommendations for the future. Before discussing the courses of action and the evaluation criteria in detail, however, some consideration of what others have written and said about the training centers is appropriate. Chapter Two takes a detailed look at twenty years of professional literature surrounding and sometimes influencing the evolution of the CTCs.

## CHAPTER TWO

# LITERATURE REVIEW

Few aspects of the Army training program have received more attention than the Combat Training Centers (CTCs). Professional journals frequently feature articles focusing on one or more lessons drawn from experiences at the training centers.<sup>10</sup> The Center for Army Lessons Learned (CALL) published literally thousands of articles based on observations and experiences at the training centers. In many ways, CTC experience has become the litmus test of credibility on the tactical battlefield and, “When I was at the NTC . . .” the hallmark of sound tactical wisdom.

Yet, for all the written words expended on the CTCs, only a minor fraction dealt with the training centers as training devices in and of themselves. For the purposes of this monograph, the articles, books, and papers with relevance to the research question were much fewer in number than one might expect given the reputation of the CTCs both within and without the Army. Those which dealt directly on the research topic may be loosely grouped into three categories: those that reflected the historical development of the training centers; those that offered arguments in favor of stability or change in the methods employed at the training centers; and those that provided official guidance concerning the purpose, mission, or future of the training centers. Each of these categories is considered in turn in this chapter.

## TWENTY YEARS OF EVOLUTION

The history of the training centers fell largely into two phases. The first phase began with the initial efforts to create a National Training Center in the late 1970s and ended with the Army’s complete acceptance of the training center concept following the success of *Operation Desert*

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<sup>10</sup> For example, the December, 2002, edition of *Military Review* contained eleven feature articles. Of these, one used CTC experience as primary source of evidence in support of the argument, a second used the CTCs as an example of solid training, and a third was written by a former observer/controller at a CTC.

*Storm* in 1991. Throughout this period, the CTC program remained focused primarily on the potential for large-scale, conventional war in Europe. The second phase began with the end of the Gulf War and continues to today. In this period, the CTCs attempted to make modifications to their training methods and scenarios in order to account for changing conditions in the Army and in the world at large. While the first phase was relatively well documented by official Army histories, the second phase could be pieced together only by reviewing the occasional situation reports published in professional journals by officers assigned to the CTCs. The first phase was, therefore, somewhat easier to understand.

Anne Chapman, the research historian of the Training and Doctrine Command (TRADOC) published the official history of the early years of the NTC in a two volume series. The first volume covered the period from 1976 to 1984, and focused on the early development of the CTC concept. Of interest in understanding the original design of the NTC, Chapman concluded the first volume by crediting its creation to the fortuitous combination of the arrival of new weapon systems in the Army inventory, the publication of the new AirLand Battle doctrine, the Army's experiences in Vietnam, an expanding military budget, and the commitment of many senior leaders to more realistic training.<sup>11</sup> Chapman's second volume covered the history of the NTC up to 1993, and concluded with the training center's continued efforts to modernize its opposing force and expand its capabilities to handle three-battalion brigade rotations.<sup>12</sup> Both of Chapman's volumes provided details of the various changes considered during the evolution of the NTC, to include those accepted and those eventually rejected. Unfortunately, TRADOC stopped the CTC historical effort with Chapman's second work, and no official history exists for the NTC after 1993, or for either the JRTC or CMTC.<sup>13</sup> Even so, for the period concluding with *Operation*

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<sup>11</sup> Anne W. Chapman, *The Origins and Development of the National Training Center, 1976-1984* (Fort Monroe, Virginia: United States Army Training and Doctrine Command, 1994), 142.

<sup>12</sup> Anne W. Chapman, *The National Training Center Matures, 1985-1993* (Fort Monroe, Virginia: United States Army Training and Doctrine Command, 1997), 308-309.

<sup>13</sup> Anne Chapman, personal email to the author, dated 23 Jul 02.

*Desert Storm*, Chapman provided a concise understanding of the history of the CTCs. After the Army returned from the Gulf War, the recording of the history of the CTCs fell to individual officers writing for professional journals, typically attempting to bring some portion of the Army up to date on the latest changes at the training centers. A few such articles serve to illustrate the period. In 1995, Major Tom Buning explained that the NTC had changed its focus from the battalion to the brigade level, and that the opposing force had abandoned Soviet-style tactics to pursue a capabilities-based tactical framework.<sup>14</sup> In 1996, Colonel Charles W. Ennis informed the Army the NTC had incorporated reception, staging, integration, and onward movement (RSOI) into the standard rotation scenario.<sup>15</sup> In 2000, Lieutenant Colonel Donald C. McGraw provided a detailed look at the standard CMTC rotation, highlighting the fact that almost half of the units rotating through the training center were participating in a mission rehearsal exercise (MRE) for stability and support operations.<sup>16</sup> Later the same year, Colonel Mark P. Hertling and Lieutenant Colonel James Boisselle offered a similar update from the NTC, highlighting the increasing flexibility of the opposing force doctrine; the inclusion of civilians, media, and military operations on urban terrain (MOUT) within rotations; and the increased integration of Air Force and Marine Corps forces into the NTC scenario.<sup>17</sup> Taken collectively, these four articles reflected the efforts of the CTCs to adapt to the changing environment in the 1990s.

From both the official histories of Anne Chapman and the periodic updates from officers serving at the training centers, a central theme emerged concerning the basic nature of the CTCs: as times changed, the training centers made significant efforts to change with them. While

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<sup>14</sup> Major Tom Buning, "Dynamic Improvements at the National Training Center," *Engineer* (August, 1995): 36-38.

<sup>15</sup> Colonel Charles W. Ennis and Major Michael T. Mahoney, "Integrating Force Projection into NTC Rotations," *Military Review* (September-October, 1996): 10-15.

<sup>16</sup> Lieutenant Colonel Donald C. McGraw, "The CMTC: Remaining Relevant Today, Preparing for Tomorrow," *Field Artillery* (March-April, 2000): 19-21.

<sup>17</sup> Mark P. Hertling and James Boisselle, "Coming of Age in the Desert: The NTC at Twenty," *Military Review* (September-October, 2001): 64-71.

historical documents recorded the efforts of the CTCs to match the emerging reality, the more lively and revealing were those documents, written by both Army officers and outside agents, which proposed or opposed the changes in the first place. While historical documents recorded what *had* happened, the next category of writings attempted to detail what *should* happen.

## **VOICES FOR STABILITY AND CHANGE**

If the official history of the CTCs tended to be optimistic about the ability of the training centers to make adequate adjustments in light of a changing world, other sources have not unanimously agreed. A survey of documents written to examine changes to the CTCs revealed both a group with deep allegiance to portions of the existing model and an opposition camp with decidedly different views about the road the CTCs should take. In contrasting these two groups, several prominent issues emerged, including: the use of situational training exercises (STXs) as a part of a CTC rotation; the expansion of CTC training to more fully incorporate other service forces; the inclusion of stability and support operations within CTC scenarios; and the employment of mobile training teams (MTTs) of CTC observer/controllers (O/Cs) to assist units in home station training prior to rotating to a CTC. While individual writers offered additional suggestions, these emerged as relatively common themes among those who sought change in the CTCs.

For many, however, some elements of the CTCs remained proven pillars of tactical success, and should not be subject to modification. In 1999, Army War College student Lieutenant Colonel Ronald L. Bertha published his monograph examining three proposed changes to the NTC: the inclusion of STXs at the beginning of a rotation, a change of focus away from conventional operations and toward stability and support operations (SASO) within the NTC scenario, and the elimination of Reserve Component rotations. Using the 1997 edition of the National Military Strategy as the source of his evaluation criteria, Lieutenant Colonel Bertha argued the NTC should not include STXs, SASO, or RC rotations within its training methods.



He concluded with the assertion that the NTC had changed little in the past twenty years and would likely change little in the next two decades.<sup>18</sup> Lieutenant Colonel Bertha refined these ideas in a subsequent journal article in which he identified the key, non-negotiable components of the success of the NTC as: the true replication of time and space, the requirement to integrate and synchronize real units and assets, the application of pressure on the commander, and the feedback provided by the O/Cs through the after action review (AAR) process.<sup>19</sup> In a 2001 article based on a research project for the Army Research Institute, Bruce J. Avolio added support to at least one of Lieutenant Colonel Bertha's assertions, singling out the O/Cs at the JRTC as exemplars of the "teaching, coaching, and mentoring" which characterize transformational leadership.<sup>20</sup> Clearly, some professionals considered the CTCs to be on the right track, and cast a distrustful eye on those calling for change.

Even so, some did call for change, and even for fairly radical change. Beginning in 1995, officers in the Army and individuals and agencies outside the Army began to be more and more vocal about what they considered necessary modifications to how the CTCs operated. These proponents of change ranged from senior officers at the Army War College to junior officers in sister services, to government oversight agencies. They all shared a sense that the CTCs could, and should, be more than they were.

The opening volley of dissent came from a group of War College students with earlier assignments as senior O/Cs at the CTCs. In 1995, this group of eight officers published a seventy-seven page collection of essays in which they recommended a number of significant changes to the CTC process, to include: changing Army personnel policies to stabilize leaders and soldiers within units; establishing home station "proficiency gates" units would have to

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<sup>18</sup> Lieutenant Colonel Ronald L. Bertha, "The Future of the Combat Training Centers to Meet the National Military Strategy" (Thesis, United States Army War College, 1999), 21-22.

<sup>19</sup> Lieutenant Colonel Ronald L. Bertha, "Battle Command: Replicating the NTC Experience," *Military Review* (November-December, 2000): 9-16.

<sup>20</sup> Bruce J. Avolio, "Winning With a Full Range of Leadership," *Military Review* (March-April, 2001): 55-57.

complete before attending a CTC rotation; relating the outcome of battles to the proficiency of the commander; expanding the role of joint operations; increasing the unpredictability of the rotations; and using MTTs to assist home station training prior to a CTC rotation.<sup>21</sup> The authors justified most of their recommendations by citing decreasing unit proficiency among units rotating through the CTCs, a trend which one of the authors, Colonel John D. Rosenberger, confirmed in a 1999 article he wrote as the commander of the opposing force at the NTC.<sup>22</sup>

Others called for less radical changes to the CTCs. In 1999, a Marine Corps company commander participated in a NTC rotation and subsequently published a highly laudatory article in which he urged the expansion of Marine participation in NTC rotations, going so far as to suggest that Marine units should be involved in every rotation and should command the rotational brigade twice per year.<sup>23</sup> In 2001, a similar article appeared following a Marine company's participation in a rotation at the JRTC. Again, the Marine officer recommended a marked expansion in the joint nature of the CTCs.<sup>24</sup> While the Army perhaps enjoyed the enthusiastic endorsement of Marine officers, agents both inside and outside the Army found much to be disappointed about at the CTCs.

In 1999, the Government Accounting Office released a report which stated that the CTCs, while undoubtedly superior to almost all other training, fell short of their full potential. The report claimed that units were reporting to their rotations unprepared for the experience, that the realism of the CTCs had been diminished in order to compensate for poor unit preparation, that the age and condition of much of the CTC equipment detracted from training, and that the Army's personnel policies made it almost impossible for units or individuals to benefit from their

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<sup>21</sup> Colonel Paul Herbert, et al. "Combat Training Centers: The Twenty-first Century Schools for the Application of Military Arts and Science" (Thesis, United States Army War College, 1995).

<sup>22</sup> Colonel John D. Rosenberger, "Reversing the Downward Spiral of Combat Readiness: Change the Way We Measure It," *Military Review* (November-December, 1999): 54-59.

<sup>23</sup> First Lieutenant N. Van Taylor, "Why the Marine Corps Needs the NTC," *Marine Corps Gazette* (June, 1999): 49-50.

<sup>24</sup> Captain T. Shane Tomko, "The JRTC Experience," *Marine Corps Gazette* (March, 2001): 52-56.

experiences at a CTC. The report recommended the use of STXs at the beginning of each rotation to assist the unit in meeting minimum training requirements; the expansion of the training scenario to include MOUT, terrorists, media, and civilians on the battlefield; and the restructuring of the CTC data collection system to allow Army-wide trend assessment and learning.<sup>25</sup> A year later Major John A. Nagl published an article pointing out that the CTCs continued to focus on offense and defense despite the increasing number of SASO mission assigned to the Army. He argued the CTCs should shift their focus to the most likely contingency missions of stability and support operations.<sup>26</sup>

Perhaps in response to these and other criticisms, the CTCs continued their efforts to adjust to new realities. By 2002, many changes were in place and others were planned for the near future. In March of that year, Brigadier General James D. Thurman, commander of the NTC, argued in Congressional testimony for funding for several major modifications to the NTC, including: the modernization of opposing force vehicles and aircraft; the expansion of the post rail head to enable more realistic force projection operations; the development of a sixteen square acre MOUT training facility; an upgrade to the center's instrumentation system; and an expansion of the training area to allow more dispersed operations.<sup>27</sup> Clearly, some agents of change existed inside as well as outside the CTCs.

Yet even as the CTCs considered proposed changes to their methods and structures, adopting some and rejecting others, the Chief of Staff of the Army developed a new vision for the Army, Transformation. In considering the future of the CTCs, the concepts that underpinned

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<sup>25</sup> U.S. General Accounting Office, National Security and International Affairs Division, *Military Readiness: Full Training Benefits From Army's Combat Training Centers Are Not Being Realized* (Washington, D.C., 1999).

<sup>26</sup> Major John A. Nagl and Cadet Elizabeth O. Young, "Si Vis Pacem, Para Pacem: Training for Humanitarian Emergencies," *Military Review* (March-April, 2000): 31-37.

<sup>27</sup> Brigadier General James D. Thurman, "Military Training Capabilities/Shortfalls," Statement to U.S. House of Representatives Armed Services Committee, 8 March, 2002.

Transformation, and their likely impact on Army training in general and the CTCs in particular, threatened to make the contemporary changes look like small potatoes.

## **TRANSFORMATION: THE OFFICIAL VISION**

Although the Army and other agencies produced many documents pertaining to Transformation, the most salient for the current study are the *Army Transformation Campaign Plan* (ATCP), *TRADOC Pamphlet 525-3-90/O&O: The United States Army Objective Force Operational and Organizational Plan for the Maneuver Unit of Action*, the *Combat Training Center Master Plan* (CTCMP), and FM 7-0, *Training the Force*. Collectively, these documents delineated the major characteristics of the future environment of the Army, the method the Army would use to succeed in the future environment, and the role the CTCs would play in training for the future Army. Each, in its own way, indicated that more substantive changes to the CTCs might be appropriate for the future, but fell short of clearly identifying what those more substantive changes might be.

The ATCP, published in April, 2001, as the foundation document for Army Transformation, established the parameters for the future Army force by defining it as responsive, deployable, agile, versatile, lethal, survivable, and sustainable. The document further directed the CTCs to “recapitalize and modernize to keep pace with changes in force structure, technology, and the changing world environment.”<sup>28</sup> Although the document stopped short of providing specific guidance for the transformation of the CTCs, it indicated the characteristics of the force the CTCs would train in the future and directed the CTCs to adjust accordingly.

A more detailed look at the Objective Force came from *TRADOC Pamphlet 525-3-90/O&O*. Published in July, 2002, this document provided the anticipated force structure for the Objective Force unit of action (UA), the future equivalent to the contemporary brigade combat team. It

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<sup>28</sup> U.S. Army, *United States Army Transformation Campaign Plan* (Washington, D.C.: Headquarters, Department of the Army, 2001): 5, 8.

provided some specific requirements for the UA which bear directly on the ability of the CTCs to train the UA in the future. Among the most interesting requirements, the UA would be capable of operating in all types of terrain to include urban, able to cope with the close proximity of “civilians, paramilitaries, insurgents, and others,” able to transition between engagements and missions quickly, and capable of full spectrum operations, to include offense, defense, stability, and support.<sup>29</sup> Although the pamphlet did not directly address the CTCs, it further refined the type of training environment that CTCs would have to produce in order to meet the training requirements of the future Army.

Planners at the CTCs took both documents into consideration when they drafted the CTCMP. An annually-updated guide to the future plans of the CTCs, the edition published in June, 2002, attempted to implement the ATP guidance to modernize and recapitalize the CTCs. It identified the need for several modifications to the CTCs in the near term, to include such changes as the expansion of the JRTC to enable three battalions to train simultaneously, the potential for the creation of a training center focused primarily on corps aviation deep attacks, and the creation of a MOUT training facility at the NTC.<sup>30</sup> Despite its claim to describe the transformation of the CTCs, however, the overwhelming majority of changes addressed in the CTCMP proved relatively short-term and most commonly dealt with training shortfalls identified for the current force. Whatever its merits as a resource planning document, the CTCMP does not carry to conclusion the concepts outlined in the ATP and detailed in *TRADOC Pamphlet 525-3-90/O&O*.

The short-comings of both the ATP and *TRADOC Pamphlet 525-3-90/O&O* became even more evident when the Army released FM 7-0, *Training the Force*, on 21 Oct 02. A strange

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<sup>29</sup> U.S. Army, *TRADOC Pamphlet 525-3-90/O&O: The United States Army Objective Force Operational and Organizational Plan for the Maneuver Unit of Action* (Fort Monroe, Virginia: Headquarters, Training and Doctrine Command, 22 July, 2002): 22, 27.

<sup>30</sup> U.S. Army, *Combat Training Center Master Plan – FY 04-09* (Washington, D.C.: Headquarters, Department of the Army, 13 June, 2002): 2-1, 2-4.

hybrid of the Cold War training model and the much different world of the contemporary Army, *Training the Force* used the success of such recent engagements as Operation Anaconda as evidence that the Army's battle focused training model, which emerged in 1990, had been validated on the battlefield. In the next paragraph, however, the manual stated that the new global environment required Army units to "simultaneously train, deploy, and execute."<sup>31</sup> If the authors recognized the inherent contradictions in these assertions, they made no effort to reconcile them elsewhere in the manual. In fact, to a large extent *Training the Force* simply recognized that the training challenges of the Army had changed significantly, but fell short of identifying how the Army would overcome those challenges. In perhaps the most interesting example of this recognition of the problem but failure to identify the solution, *Training the Force* listed six "tangible benefits" of the CTC program; "trained and ready units" was not among them.<sup>32</sup>

## CONCLUSION

Few aspects of the Army training program have received more attention than the CTCs, yet only a minor fraction of the works on the topic dealt with the training centers as training devices in and of themselves. Of these, some offer historical perspectives, others argue for the continued operation of the CTCs as they exist, and a few argue for change on some scale. None, to include the official publications directly tied to the management of the CTCs, adequately addressed the changes which may be necessary to support Army Transformation.

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<sup>31</sup> U.S. Army, *Field Manual 7-0, Training the Force* (Washington, D.C.: Headquarters, Department of the Army, 21 October, 2002): 1-3.

<sup>32</sup> *Ibid.*, 1-11.

## CHAPTER THREE

### METHODOLOGY

In attempting to identify the changes necessary to allow the CTCs to train the Objective Force, this study employed a standard scientific approach. First, the study developed a set of evaluation criteria derived primarily from the characteristics of the Objective Force delineated in the *ATCP*. Second, the study detailed four broad courses of action for the future of the CTCs, attempting to represent the range of options facing the Army. These courses of action reflected, in many cases, the recommendations for change found in military journals and other professional venues. Finally, the study applied the evaluation criteria to each of the courses of action to determine their respective strengths and weaknesses. This chapter details the results of the first two of these steps, following the same general chronological order as the study itself. The results of the third step are contained in Chapter Four.

#### DEFINING THE EVALUATION CRITERIA

The study used three evaluation criteria: rapid deployment, full spectrum operations, and an adaptive opponent. In arriving at these criteria, the study followed a logic trail that began at the Army's definition of the characteristics of the Objective Force and included an assessment of the current training methods and the principles of training. This section discussed the details of the logic and the final definitions of the evaluation criteria.

In establishing the evaluation criteria for the study, the *ATCP* served as the basic document. The *ATCP* defined seven characteristics of the Objective Force: responsive, deployable, agile, versatile, lethal, survivable, and sustainable.<sup>33</sup> Clearly, the future CTCs would have to provide training designed to produce units with these characteristics, and the characteristics therefore served as a solid starting point for the development of evaluation criteria. But the *ATCP* did not

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<sup>33</sup> U.S. Army, *United States Army Transformation Campaign Plan* (Washington, D.C.: Headquarters, Department of the Army, 2001): 5.

make an attempt to evaluate the degree to which the current force structure, and by implication the current CTC model, already produced those characteristics.

*TRADOC Pamphlet 525-3-90/O&O* provided a more detailed look at the characteristics of the Objective Force by using those characteristics as evaluation criteria in assessing the current force structure. Using a simple color-code of red, amber, and green, *TRADOC Pamphlet 525-3-90/O&O* rated the current force structure as red in at least one arm (heavy or light) in all but two of the evaluation criteria: responsiveness and versatility.<sup>34</sup> By implication, the Objective Force would be most different from the current force in five key areas: deployability, agility, lethality, survivability, and sustainability. It was to these areas that the study turned for more refined evaluation criteria.

The newly published *FM 7-0, Training the Force*, released in October, 2002, provided the next link in the development of the study's evaluation criteria. In defining the principles of training for the Army, *Training the Force* replaced the dated principle of "Train as you fight" with the more precise, "Train for combat proficiency." In explaining this principle, the manual stipulated that training should reflect realistic conditions to the extent possible, including such elements as "civilians on the battlefield; joint, multinational, and interagency requirements; and varying extremes in weather." The manual expanded the basic principle to include two sub-components: training should require soldiers and units to perform the same tasks expected of them in combat, and training should provide the most realistic battlefield conditions possible for the completion of those tasks.<sup>35</sup> Training, in other words, should mimic the anticipated battlefield to the greatest level of fidelity possible within the constraints of resources and safety.

Clearly, this principle held significant implications for the CTCs. The CTCs of the future

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<sup>34</sup> U.S. Army, *TRADOC Pamphlet 525-3-90/O&O: The United States Army Objective Force Operational and Organizational Plan for the Maneuver Unit of Action* (Fort Monroe, Virginia: Headquarters, Training and Doctrine Command, 22 July, 2002): 10.

<sup>35</sup> U.S. Army, *Field Manual 7-0, Training the Force* (Washington, D.C.: Headquarters, Department of the Army, 21 October, 2002): 2-6 – 2-7.



should provide a realistic battlefield that would require the training unit to exhibit, to a greater degree than the current force structure, the five critical characteristics of deployability, agility, lethality, survivability, and sustainability. To meet that requirement, the CTCs would have to change in three critical areas: rapid deployment, replication of full spectrum operations, and replication of an adaptive opponent. These three areas served as the study's evaluation criteria for the future of the CTCs, and they are discussed in detail below. The evaluation matrix (see Table 1) contains a detailed explanation of the scoring standards for each criterion.

The study defined rapid deployment as the degree to which a given course of action required the training unit to practice rapid strategic and operational deployment with limited advance notification. This evaluation criteria derived from the conditions anticipated by the ATCP, which requires the Objective Force to deploy "beginning within hours of notification," and further defines deployability goals with benchmarks of "a combat brigade on the ground within 96 hours, a division within 120 hours, and five divisions within 30 days."<sup>36</sup> This criteria contrasted markedly with the current CTC rotation development cycle, which requires weeks and months of advance notification to the participating units.<sup>37</sup>

The study defined full spectrum operations as the degree to which the course of action required the training unit to execute offensive, defensive, stability, and support operations, reflecting the spectrum of operations outlined in *FM 3-0, Operations*.<sup>38</sup> This criterion included two sub-components: rapid transitions and *ad hoc* organizations. The study defined rapid transitions as the degree to which the course of action required the training unit to transition from one type of operation to another with limited advance notice. This criterion stemmed from the

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<sup>36</sup> U.S. Army, *United States Army Transformation Campaign Plan* (Washington, D.C.: Headquarters, Department of the Army, 2001): A-2-1.

<sup>37</sup> The exact meaning of the 96-hour deployment requirement for the Objective Force was a source of some debate. Some interpreted this as the amount of time between the beginning and end of the deployment operation, while others interpreted it as the amount of time from alert to the completion of the deployment operation. This study adopted the later definition because it appeared to better align with the overall description of the Objective Force in the *ATCP*.

<sup>38</sup> U.S. Army, *Field Manual 3-0, Operations* (Washington, D.C.: Headquarters, Department of the Army, 14 June, 2001): 1-15.

Table 1. Evaluation Matrix				
Evaluation Criteria	Description	Scale		
		Low	Medium	High
<u>Rapid deployment</u>	The degree to which the COA required the training unit to practice rapid strategic and operational deployment with limited advance notification	Units must deploy to the CTC and into the training scenario with more than 30 days of notification	Units must deploy to the CTC and into the training scenario within 30 days of notification	Units must deploy to the CTC and into the training scenario within 96 hours of notification
<u>Full spectrum operations</u>	<u>Rapid transitions</u> : The degree to which the COA required the unit to transition from one type of operation to another with limited advance notification	SASO are limited to mission-specific rehearsals outside of standard rotations	SASO are limited to pre- and post-hostility portions of standard rotations	SASO are intermingled with and occur simultaneously with offensive and defensive operations
	<u>Ad hoc organizations</u> : The degree to which the course of action required the unit to rapidly integrate new units, organizations, or agencies while transitioning from one type of operation to another	The unit deploys to the CTC with its habitual task organization.	The unit deploys to the CTC with its habitual task organization and is augmented with other Army units as required by the initial mission requirements.	The unit deploys to the CTC with its habitual task organization and is augmented with other Army units, joint forces, and US and foreign government agencies at various points in the rotation
<u>Adaptive opponent</u>	The degree to which the COA required the unit to cope with a broad array of enemy, hostile, and neutral forces representing a wide spectrum of capabilities and equipment and demonstrating a willingness to adapt to achieve an advantage	The OPFOR employs a single, standardized doctrine and organization (Cold War model)	The OPFOR employs a flexible doctrine and several variations on organization and equipment, to include unconventional threats (COE model)	The OPFOR employs a flexible doctrine and several variations on organization and equipment, to include unconventional threats; the OPFOR is capable of rapidly tailoring itself to reflect a specific real world threat

ATCP characteristic of “agility,” which included the ability to “transition within or between operations from non-combat disaster relief to low intensity contingencies to high intensity warfighting” with “little or no time to change mindset or organizational design.”<sup>39</sup> The study defined ad hoc organizations as the degree to which the course of action required the unit to rapidly integrate new units, organizations, or agencies while transitioning from one type of operation to another. This reflected the ATCP discussion of the characteristic of “agility” and the recognition that the requirement to transition from one type of operation to another would rarely include the time necessary to “change mindset or organizational design.”<sup>40</sup> To replicate this challenge, the CTCs would have to require the training unit to accept new units and organizations, representing new capabilities and limitations, in the midst of transitioning from one type of operation to another. This requirement held true for both combat and combat service support capabilities, as the ATCP recognized when it indicated that the Objective Force “must retain the capability to continue operations for one day longer than the adversary we confront.”<sup>41</sup> Both of these requirements, rapid transitions and *ad hoc* organizations, contrasted sharply with the current practice of separating CTC rotations into “standard” warfighting rotations and mission rehearsal exercises (MREs) focused on stability and support operations.

The study defined adaptive opponent as the degree to which the course of action required the training unit to cope with a broad array of enemy, hostile, and neutral forces representing a wide spectrum of capabilities and equipment and demonstrating a willingness to adapt those capabilities and equipment in ways designed to achieve an advantage. This requirement reflects the ATCP discussion of “lethality” and “survivability,” characteristics the Objective Force must possess against an enemy of “adaptive and unpredictable nature” which will employ “asymmetric

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<sup>39</sup> U.S. Army, *United States Army Transformation Campaign Plan* (Washington, D.C.: Headquarters, Department of the Army, 2001): A-2-2.

<sup>40</sup> Ibid.

<sup>41</sup> Ibid., A-2-3.

strategies and niche capabilities to counter US strengths or exploit US vulnerabilities.’<sup>42</sup> This requirement aligned well with the recent transition of the CTCs to the Contemporary Operating Environment (COE) model of the Opposing Force (OPFOR), but whether the COE would suffice for the Objective Force remained an issue for examination.

Starting with the ATCP and working through the principles of training, then, the study arrived at three primary evaluation criteria: rapid deployment, full spectrum operations, and an adaptive opponent. After defining the evaluation criteria, the study next turned to detailing the range of options open for the future of the CTCs.

## **DEFINING THE OPTIONS**

In developing the courses of action for consideration, the study drew heavily from professional writings advocating change at the CTCs. Two of the courses of action came directly from arguments for change published in professional venues. A third, more radical course of action grew from suggestions that the Army adopt an expeditionary model for personnel management in order to enhance unit cohesion. The final course of action represented a synthesis of ideas about the nature of future joint operations. Taken together, the four courses of action offer a fair representation of the options open to the Army in transforming the CTCs, from a relatively minor expansion of the training scenarios to a fundamental change in the role and function of the CTCs.

The study defined each course of action in terms of the training scenario used, the training method employed, and the training sequence for a CTC rotation. In some of the courses of action, current practices remained intact for one of more of these areas. Consequently, the analysis of the first course of action represented, to a large degree, an analysis of the current CTC model. Each course of action is described in detail below.

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<sup>42</sup> U.S. Army, *United States Army Transformation Campaign Plan* (Washington, D.C.: Headquarters, Department of the Army, 2001): 3.

Table 2. Course of Action Summery

	<b>Description</b>	<b>Training scenario</b>	<b>Training method</b>	<b>Training sequence</b>
1	Expanded mission set model	Addition of SASO missions to “standard” rotations	No change to current practice	No change to current practice
2	Expanded charter model	Addition of SASO missions to “standard” rotations	Addition of lane training period at the beginning of rotation; O/C MTTs augment home station training	No change to current practice
3	Joint training center model	Unit operates under the control of a JTF headquarters	Live simulation at the brigade and battalion levels linked electronically with constructive simulations at higher echelons	No change to current practice
4	Expeditionary model	Training scenario based on most likely contingency missions	Unit deploys from home station directly into “theater”	Rotation follows a period of progressive home station training and immediately precedes a deployment cycle

## COURSE OF ACTION 1: EXPANDED MISSION SET MODEL

While this course of action retained the same training methods and training sequence as the current model, it called for the expansion of the standard training scenarios to include offense, defense, stability, and support operations. This contrasted with the traditional practice of relegating stability and support operations primarily to mission-specific MREs. The expanded mission set model of change for the CTCs required a relatively minor adjustment to current practice, and to some degree this course of action had already been adopted on a limited basis.

During the 1990s, stability and support operations played a limited role in standard rotations, being relegated almost exclusively to MREs conducted for units preparing for planned deployments to the Balkans. From 1996 through 1998, for example, 42 percent of all battalions

rotating through the CMTC in Germany did so for a MRE specifically tailored for upcoming deployments. “Standard” rotations, however, remained focused on “attacks, movement-to-contact, and defenses.”<sup>43</sup> The NTC retained a similar focus on offense and defense, although by the end of the 1990s the standard rotation scenarios began to include some stability and support tasks during the initial week of RSOI.<sup>44</sup> The expanded mission set option, as defined within this study, involved a more robust representation of stability and support operations within the standard rotation, elevating them to a status commiserate with the full spectrum operations model of FM 3-0. This course of action represented the most conservative approach to change.

## COURSE OF ACTION 2: EXPANDED CHARTER MODEL

Although the CTCMP explicitly tied the three CTCs to the training of battalions and brigades, this course of action considered an expanded charter for the CTCs which would include training individual companies.<sup>45</sup> In this course of action, units rotating to a CTC would begin their rotations with a series of company STXs designed to train units on the tasks – for offense, defense, stability, and support operations – they would most likely face during the battalion or brigade portions of the exercise. Prior to deploying to the CTC, O/Cs would join the unit during home station training to provide expert feedback and assist the unit in preparing for the CTC rotation.

As with the first course of action, this course of action enjoyed some limited employment in the late 1990s and early twenty-first century. In the standard rotation of 2000, for example, a unit rotating to the CMTC spent five to seven days conducting company exercises prior to the

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<sup>43</sup> Lieutenant Colonel Donald C. McGraw, “The CMTC: Remaining Relevant Today, Preparing for Tomorrow,” *Field Artillery* (March-April, 2000): 21.

<sup>44</sup> Mark P. Hertling and James Boisselle, “Coming of Age in the Desert: The NTC at Twenty,” *Military Review* (September-October, 2001): 66.

<sup>45</sup> U.S. Army, *Combat Training Center Master Plan – FY 04-09* (Washington, D.C.: Headquarters, Department of the Army, 13 June, 2002): 1-13 – 1-14.

beginning of the battalion exercise.<sup>46</sup> While not as robust as the CMTC, the NTC offered company training exercises specifically for MOUT operations.<sup>47</sup> The CTCs had less experience in sending MTTs to units. In 1994, the O/Cs of the NTC traveled to Fort Carson to conduct a “home station rotation” because lack of funding made the costs of moving the brigade to the NTC prohibitive. In 1995, a group of War College students used that experience to argue for MTTs as a standard part of every rotation.<sup>48</sup> The CTCs did not choose to implement their recommendation, but the second course of action considered in this study did. This course of action represented a slightly more liberal approach to change than that of the first course of action, but remained well within options already implemented on a limited scale or considered by senior Army leaders.

### COURSE OF ACTION 3: JOINT TRAINING CENTER MODEL

A third course of action grew out of the *Joint National Training Capability Report* of March, 2002. The United States Joint Forces Command (USJFCOM) document highlighted the need for more advanced joint interoperability training, and presented a concept in which several training facilities would be linked together to support a joint interoperability exercise. In the USJFCOM example, the exercise included the NTC, the Marine training area of Twenty-nine Palms, and a number of west coast air and naval stations to train a joint task force consisting of an Army brigade, a Marine Expeditionary Brigade, a Navy carrier battle group, and an Air Expeditionary Force from the USAF. The various units and the JTF headquarters would participate in a linked group of live, constructive, and virtual simulations.<sup>49</sup>

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<sup>46</sup> Lieutenant Colonel Donald C. McGraw, “The CMTC: Remaining Relevant Today, Preparing for Tomorrow,” *Field Artillery* (March-April, 2000): 21.

<sup>47</sup> Mark P. Hertling and James Boisselle, “Coming of Age in the Desert: The NTC at Twenty,” *Military Review* (September-October, 2001): 67.

<sup>48</sup> Colonel Paul Herbert, et al. “Combat Training Centers: The Twenty-first Century Schools for the Application of Military Arts and Science” (Thesis, United States Army War College, 1995), 21-23.

<sup>49</sup> U.S. Joint Forces Command, *Joint National Training Capability Report* (Norfolk, Virginia: Headquarters, U.S. Joint Forces Command, March, 2002): 11,16.

When expanded as a course of action for this study, this option included changes to the training scenario and training method when compared to current practices. Units rotating to the CTCs under this model would fall under the control of a JTF headquarters which would also control other joint forces, many physically located away from the CTC and employing constructive or virtual simulations.<sup>50</sup> While stability and support operations might be included in the joint scenario, the actual missions assigned to the Army unit would depend upon decisions made by the JTF headquarters within the exercise. Through electronic connections, the actions of the Army unit would have effects in the live, virtual, and constructive simulations of the other forces involved, and *vice versa*. As with the current practice, units would rotate to a CTC at many different points in their training sequence.

Although this course of action required a significant change to the current methods of the CTCs, particularly in its requirement to integrate the Army CTCs into a larger network of exercises, it did not represent an idea outside of current military thought. As already indicated, this course of action grew out of ideas currently under consideration within the joint training community and already demonstrated in such special training events as *Millennium Challenge*. Where *Millennium Challenge* represented a one-time, high visibility training event, however, this course of action envisioned joint interoperability training as the standard for the future CTC rotation.

#### COURSE OF ACTION 4: EXPEDITIONARY MODEL

The fourth course of action represented a more radical approach to change, requiring significant modifications to Army practices well outside the CTCs proper. In this model, units would rotate to a CTC immediately after a period of individual and collective training but prior to assuming a position among the Army's deployable units. The training scenario would reflect

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<sup>50</sup> This would represent a significant change from what currently passed as "joint" training at the CTCs, Army training with some joint units participating on the fringes.



those contingencies against which the unit would be apportioned in its upcoming deployment window, and the training method would expand to include an increased emphasis on the ability of the unit to deploy directly from its home station into the “theater” created at the CTC. In short, this course of action required the CTCs to function as capstone training events for units preparing for a period of deployability.

Clearly, this course of action represented a significant change to the way the Army thinks about readiness. Under the current training doctrine, units throughout the Army maintain a minimum level of readiness at all times, with a few exceptions granted for reorganizations or transitions to new equipment. For the majority of the units and a majority of the time, Army doctrine required a level of readiness within the “band of excellence.”<sup>51</sup> Under the third course of action, this model gave way to a more expeditionary vision of readiness, in which units rotated through periods of initial training, availability for deployment, and draw down. Although the Army had no experience with such a system, several voices had voiced support for the concept in recent years.<sup>52</sup> Even so, this course of action represented a very radical change to the CTCs.

## CONCLUSION

This study considered the future of the CTCs by developing three primary evaluation criteria and four courses of action. The evaluation criteria reflected the characteristics of the Objective Force and the Army’s recently updated training model. The courses of action reflected recommendations for change from both within and without the Army itself. The study then analyzed each course of action by scoring it against the evaluation criteria. Chapter Four examines the results of that analysis.

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<sup>51</sup> U.S. Army, *Field Manual 7-0, Training the Force* (Washington, D.C.: Headquarters, Department of the Army, 21 October, 2002): 2-9.

<sup>52</sup> Perhaps the best known call for a change along these lines came from Donald Vandergriff’s *The Path to Victory*, which included a fairly detailed proposal for the adoption of a regimental system and a four year cycle of readiness for units, with only the middle two years included in the unit’s deployment window.

## CHAPTER FOUR

### ANALYSIS

After defining the evaluation criteria and the courses of action, this study applied the former to the latter in a relatively straight-forward manner. Each course of action received a broad score of LOW, MEDIUM, or HIGH within each of the evaluation criteria, based on the evaluation matrix in Chapter Three. The results of the analysis are presented below, followed by a short discussion of the relative strengths of each of the models.

#### **COURSE OF ACTION 1: EXPANDED MISSION SET MODEL**

This, the most conservative of the courses of action, scored surprisingly well in a number of areas, but also revealed some significant shortfalls in current CTC practice. Collectively, the scoring for this course of action indicated that an expanded mission set for the CTCs would be a step in the right direction, but would not fulfill all the requirements of the Objective Force.

This point was best illustrated by the LOW score the course of action earned in rapid deployment. Under established practices, units deploying to a CTC after being notified as much as a year in advance and involved in detailed coordination with the CTC staff no less than six months in advance of the rotation. In order to cope with issues such as equipment draw and other logistical requirements, many units deployed advance parties well in advance of their rotation dates. Even units traditionally considered to be rapid reaction forces, such as brigades in the 82<sup>nd</sup> Airborne Division, often received much more than thirty days advance notice of a CTC rotation, and frequently employed advance party procedures only slightly different than those employed by heavy brigades. Whatever their merits, the current deployment procedures used by the CTCs fell far short of the extremely rapid deployments envisioned in the *ATCP*.

Table 3. Summarized Scoring Data for Course of Action 1 (Expanded Mission Set Model)

<b>Evaluation Criteria</b>	<b>Definition</b>	<b>Score</b>	<b>Remarks</b>
<u>Rapid deployment</u>	The degree to which the COA required the training unit to practice rapid strategic and operational deployment with limited advance notification	LOW	No change to current practice; most units received more than 30 days advance notice of a CTC rotation
<u>Full spectrum operations</u>	<u>Rapid transitions</u> : The degree to which the COA required the unit to transition from one type of operation to another with limited advance notification	HIGH	Embedded stability and support operations within the rotation, requiring units to conduct simultaneous operations across the spectrum
	<u>Ad hoc organizations</u> : The degree to which the course of action required the unit to rapidly integrate new units, organizations, or agencies while transitioning from one type of operation to another	MEDIUM	No change to current practice; required units to deploy with habitual task organization with some additional assets; task organization remained static throughout the rotation
<u>Adaptive opponent</u>	The degree to which the COA required the unit to cope with a broad array of enemy, hostile, and neutral forces representing a wide spectrum of capabilities and equipment and demonstrating a willingness to adapt to achieve an advantage	MEDIUM	No change to emerging current practice; OPFOR included a flexible doctrine and the ability to reflect various organizational patterns and capabilities

By way of contrast, the inclusion of stability and support operations within standard CTC rotations envisioned within this course of action earned a HIGH score in rapid transitions. While past solutions, such as limiting stability and support operations to special rotations or restricting them to pre- and post-hostility portions of standard rotations, allowed units to focus on each type of operation in turn, this course of action required units to cope with stability and support operations in conjunction with the more traditional offense and defense. The result, perhaps bringing to mind the “Three Block War” of the Marine Corps, required units to rapidly transition from one type of operation to another with little advance warning. This proved to be the greatest strength of this course of action.

Less impressive, but still respectable, was the MEDIUM score in *ad hoc* organizations. Reflecting current practices, this course of action envisioned units deploying to CTCs with their habitual task organizations plus some additional assets not normally available for home station training. Using JRTC as an example, a light brigade typically deployed with its habitual units (minus one infantry battalion) plus such non-habitual units as a tactical psychological operations team or a civil affairs team. To the extent that these non-habitual units normally conducted only limited training with the brigade prior to deployment, the deployed brigade represented an *ad hoc* organization. Once the rotation began, however, the task organization stabilized and rarely changed, regardless of changes in the types of operations underway. While not a poor solution, this course of action fell short of reflecting the operational environment described in the *ATCP*.

Similarly, this course of action earned a MEDIUM score in providing an adaptive opponent. Reflecting the emerging opposing force doctrine, organization, and equipment at times referred to as the “contemporary operating environment,” this course of action avoided the dangers of a single, standardized vision of the enemy which marked the Cold War approach. It provided an enemy force with a flexible doctrine and the ability to reflect various organizational structures and equipment sets, avoiding the temptation to simplify the Army’s problem by selecting a single potential enemy as the basis for the opposing force. Nevertheless, the course of action fell short of the ideal on at least two counts. First, it paid limited attention to unconventional threats. The basis for the opposing force concept rested on the explicit assumption that the threat would be a nation-state actor referred to simply as “the State” throughout the doctrine.<sup>53</sup> Second, this course of action did not provide for the ability to reflect a real world opponent when necessary. In an

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<sup>53</sup> U.S. Army, *Field Manual 7-100.2, Opposing Force Tactics - Draft* (Washington, D.C.: Headquarters, Department of the Army, 24 August, 2001): vi.

attempt to avoid a myopic focus on a single threat, this course of action provided no capability to quickly adapt to an emerging real threat.<sup>54</sup>

Collectively, the scores of this course of action indicated that, while an increased integration of stability and support operations within CTC rotations would undoubtedly prove beneficial to the Objective Force, this step alone would not adequately prepare the CTCs for the future. Shortfalls remained in the ability of the CTCs to require units to cope with *ad hoc* organizations and unconventional threats, as well as in the capability to quickly adjust the OPFOR to represent a specific real world threat. Most importantly, this course of action required significant modification to meet the deployment requirements of the Objective Force. A good first step, this course of action left much to do to prepare the CTCs for the next twenty years.

## **COURSE OF ACTION 2: EXPANDED CHARTER MODEL**

This course of action, although hotly debated among some military professions over the previous decade, proved to be essentially indistinguishable from the first course of action from the perspective of this study. The two most significant concepts in this course of action, the dispatch of O/C MTTs to assist home station training and the inclusion of lane training at the beginning of a CTC rotation, proved to have little bearing on the ability of the course of action to meet the needs of the Objective Force in twenty years. This seems to support the argument that lane training and MTTs were short-term solutions to relatively short-term training problems and may have little relevance to future training.

Scores for this course of action matched those of the previous course of action without exception, and require only limited comment. As with the first course of action, this option failed to address the radical change in deployment windows for the Objective Force, and scored LOW on rapid deployability. Mimicking the first course of action's integration of stability and support

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<sup>54</sup> In the fall of 2002, for example, units rotating to a CTC while planning for Middle East contingencies might have expected the OPFOR to reflect Iraqi equipment and tactics. If so, they were largely disappointed.

Table 4. Summarized Scoring Data for Course of Action 2 (Expanded Charter Model)

<b>Evaluation Criteria</b>	<b>Definition</b>	<b>Score</b>	<b>Remarks</b>
<u>Rapid deployment</u>	The degree to which the COA required the training unit to practice rapid strategic and operational deployment with limited advance notification	LOW	No change to current practice; most units received more than 30 days advance notice of a CTC rotation
<u>Full spectrum operations</u>	<u>Rapid transitions</u> : The degree to which the COA required the unit to transition from one type of operation to another with limited advance notification	HIGH	Embedded stability and support operations within the rotation, requiring units to conduct simultaneous operations across the spectrum
	<u>Ad hoc organizations</u> : The degree to which the course of action required the unit to rapidly integrate new units, organizations, or agencies while transitioning from one type of operation to another	MEDIUM	No change to current practice; required units to deploy with habitual task organization with some additional assets; task organization remained static throughout the rotation
<u>Adaptive opponent</u>	The degree to which the COA required the unit to cope with a broad array of enemy, hostile, and neutral forces representing a wide spectrum of capabilities and equipment and demonstrating a willingness to adapt to achieve an advantage	MEDIUM	No change to emerging current practice; OPFOR included a flexible doctrine and the ability to reflect various organizational patterns and capabilities

operations within the standard rotation, this course of action scored HIGH on rapid transitions.<sup>55</sup>

Likewise, the adoption of current practices in terms of task organization and the employment of the contemporary operating environment OPFOR model produced scores of MEDIUM in *ad hoc* organizations and an adaptive opponent.

This course of action scored identically with the first, indicating that, at least in terms of preparing the CTCs for the Objective Force, the acceptance or rejection of lane training is of little significance. Whatever the value of lane training and MTTs in the present and immediate future,

<sup>55</sup> One might argue that the inclusion of lane training would, necessarily, reduce the amount of training time available for practicing rapid transitions, but this could be easily overcome by extending the length of the standard rotation.

this course of action fell short of providing the CTC experience necessary for the Objective Force in twenty years in exactly the same manner as the first course of action.

### **COURSE OF ACTION 3: JOINT TRAINING CENTER MODEL**

This course of action envisioned a combination of joint forces in an exercise connecting multiple locations using live, constructive, and virtual simulations in a manner similar to the recent *Millennium Challenge 2002*. Whereas the CTCs had already adopted, at least on a limited scale, aspects of the first two courses of action, this option envisioned a solution which had only been implemented once, and then for a purpose somewhat removed from the standard purpose of a CTC rotation. As a result, in order to score this course of action the study required some educated guesses about how the CTCs might adapt to make a joint rotation the rule rather than the very special exception. In making those guesses, the recent experience in *Millennium Challenge* served as a key indicator.

As with the first three options, this course of action scored LOW in rapid deployment. In all probability, rotations involving significant forces from multiple services and tying together more than simulation were almost sure to require even longer lead times for coordination than the current single-service, single-simulation model. *Millennium Challenge*, for example, involved planning and coordination over a period of eighteen months.<sup>56</sup> Although one can anticipate the time required for advance coordination to diminish as experience with joint rotations grows, there is little reason to believe the joint bureaucracy will achieve speeds much better than those achieved by the Army's bureaucracy alone. This course of action did not appear to meet the Objective Force requirements for rapid deployment.

In contrast, this course of action earned a score of HIGH in both rapid transitions and *ad hoc* organizations. Both of these scores grew out of two educated guesses about the execution of joint

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<sup>56</sup> Kernan, William F., "General Kernan and Major General Cash Discuss Millennium Challenge's Lessons Learned" *DoD News* (17 September, 2002) [Available on the internet at [http://www.defenselink.mil/news/Sep2002/t09172002\\_t917millchall.html](http://www.defenselink.mil/news/Sep2002/t09172002_t917millchall.html), assessed 31 January, 2003].

Table 5. Summarized Scoring Data for Course of Action 3 (Joint Training Center Model)

<b>Evaluation Criteria</b>	<b>Definition</b>	<b>Score</b>	<b>Remarks</b>
<u>Rapid deployment</u>	The degree to which the COA required the training unit to practice rapid strategic and operational deployment with limited advance notification	LOW	Joint coordination almost certainly required greater than 30 days advance notice
<u>Full spectrum operations</u>	<u>Rapid transitions</u> : The degree to which the COA required the unit to transition from one type of operation to another with limited advance notification	HIGH	Full integration of stability and support operations at the joint level likely resulted in a wide range of tasks for the Army component
	<u>Ad hoc organizations</u> : The degree to which the course of action required the unit to rapidly integrate new units, organizations, or agencies while transitioning from one type of operation to another	HIGH	Full joint representation forced unit to interact with units and agencies well outside its habitual relationships; these interactions changed throughout the rotation as the situation changed
<u>Adaptive opponent</u>	The degree to which the COA required the unit to cope with a broad array of enemy, hostile, and neutral forces representing a wide spectrum of capabilities and equipment and demonstrating a willingness to adapt to achieve an advantage	MEDIUM	No change to emerging current practice; OPFOR included a flexible doctrine and the ability to reflect various organizational patterns and capabilities

rotations, neither of which required any great leap of faith. Both Army and joint doctrine clearly stated that future operations would be joint in nature, and full integration of all services across the spectrum of conflict remained an overriding goal.<sup>57</sup> Given this, the study concluded that joint training rotations would be full spectrum in scope and include the frequent reorganization of available forces to meet the requirements at hand.<sup>58</sup> These conclusions played an important role in scoring this course of action.

<sup>57</sup> U.S. Department of Defense, *Joint Capstone Concept: Full Spectrum Dominance Through Joint Integration, Version 4.0 (Predecisional Draft)* Washington, D.C.: Headquarters, The Joint Staff, 22 January, 2003: 13.

<sup>58</sup> The *Joint Capstone Concept*, for example, envisioned a future where tailored, networked, and fully integrated joint forces” conduct “globally and operationally distributed operations”. (Page 13)



In the case of rapid transitions, the HIGH score reflected an assumption that joint training would include stability and support operations integrated as part of the training scenario, as this had tended to be true in past joint exercises and matched the emerging joint concept. Likewise, the HIGH score in *ad hoc* organizations reflected the assumption that the joint headquarters would employ all its forces as required by the situation, avoiding any tendency to compartmentalize forces from each service. Both of these assumptions rested on the stated intent for future joint operations described in the *Joint Capstone Concept*, which called for integrated action by joint forces across the full spectrum of conflict.<sup>59</sup> Without significant changes in the employment of joint forces, it seemed extremely unlikely that Army forces participating with other service forces in a joint rotation would have anything like a habitual relationship with most of the joint forces, and far more likely that little or no pre-rotation joint training would be available. If this assumption held true, units rotating through a joint rotation would find it necessary to cope with a series of essentially *ad hoc* organizations of joint forces at different points in the rotation, thereby training in an environment almost exactly like the operational environment envisioned in the *ATCP*.<sup>60</sup>

This course of action earned a MEDIUM score in providing an adaptive opponent, but this score assumed the joint rotation would largely adopt the emerging Army opposing force doctrine reflecting the contemporary operating environment. This may prove to be overly optimistic. The *Joint National Training Capability Report* of 2002 identified the requirement for a Standing OPFOR Functional Headquarters to oversee and coordinate the opposing forces of the various services. The document called for greater control of OPFOR units to ensure that all joint forces

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<sup>59</sup> U.S. Department of Defense, *Joint Capstone Concept: Full Spectrum Dominance Through Joint Integration, Version 4.0 (Predecisional Draft)* Washington, D.C.: Headquarters, The Joint Staff, 22 January, 2003: 13.

<sup>60</sup> FM 3-0, *Operations*, hinted at this environment in its discussion of how supporting and supported relationships in a JTF are likely to change over the duration of an operation. The implication appeared to be that task organizations would likewise change, although this was not explicitly stated. (Page 2-6 – 2-7)

participating in the training were adequately tested.<sup>61</sup> The pessimists would perhaps interpret this as an indication that the opponent in a joint rotation would be more controlled and hence less adaptive than that in an Army rotation. The resignation of the OPFOR commander during *Millennium Challenge*, citing the lack of freedom of action in employing the opposing force, might serve as evidence of such a tendency. Nevertheless, this study accepted the interpretation of General Kernan, the Joint Forces Command commander, who claimed the lack of freedom of action for the OPFOR represented the unique characteristics of the exercise as an experiment, not an inherent desire to limit the adaptability of the enemy.<sup>62</sup>

Collectively, the scores of this course of action indicated that while the joint training center model offered significant improvements in full spectrum operations training, it fell short of addressing the Objective Force's requirements for rapid deployment and an adaptive enemy. A greater emphasis on joint operations at the CTCs appeared justified, but this alone would not prepare the CTCs to effectively train the Objective Force.

#### **COURSE OF ACTION 4: EXPEDITIONARY MODEL**

To an even greater extent than the third course of action, this option required considerable imagination in scoring. It represented by far the most radical approach to change at the CTCs, requiring changes not just to the CTCs themselves but to the Army's basic approach to readiness and deployability. Whereas the first three courses of action offered some limited historical evidence to use as a basis for analysis, this course of action required the study to consider an Army much different from current practice.

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<sup>61</sup> U.S. Joint Forces Command, *Joint National Training Capability Report* (Norfolk, Virginia: Headquarters, U.S. Joint Forces Command, March, 2002): 12. This report dealt specifically with joint interoperability exercises, not a standardized joint rotation built around a CTC as modeled here.

<sup>62</sup> Kernan, William F., "General Kernan and Major General Cash Discuss Millennium Challenge's Lessons Learned" *DoD News* (17 September, 2002) [Available on the internet at [http://www.defenselink.mil/news/Sep2002/t09172002\\_t917millchall.html](http://www.defenselink.mil/news/Sep2002/t09172002_t917millchall.html), assessed 31 January, 2003].

Table 6. Summarized Scoring Data for Course of Action 4 (Expeditionary Model)

<b>Evaluation Criteria</b>	<b>Definition</b>	<b>Score</b>	<b>Remarks</b>
<u>Rapid deployment</u>	The degree to which the COA required the training unit to practice rapid strategic and operational deployment with limited advance notification	HIGH	Units rotated to a CTC at the beginning of their highest deployment readiness, thereby reducing the requirement for advance coordination
<u>Full spectrum operations</u>	<u>Rapid transitions</u> : The degree to which the COA required the unit to transition from one type of operation to another with limited advance notification	HIGH	Embedded stability and support operations within the rotation, requiring units to conduct simultaneous operations across the spectrum
	<u>Ad hoc organizations</u> : The degree to which the course of action required the unit to rapidly integrate new units, organizations, or agencies while transitioning from one type of operation to another	MEDIUM	No change to current practice; required units to deploy with habitual task organization with some additional assets; task organization remained static throughout the rotation
<u>Adaptive opponent</u>	The degree to which the COA required the unit to cope with a broad array of enemy, hostile, and neutral forces representing a wide spectrum of capabilities and equipment and demonstrating a willingness to adapt to achieve an advantage	HIGH	Tailored OPFOR to match most likely near-term contingencies for deployment window

The HIGH score earned in rapid deployment best exemplified the radical departure from business as usual. In this course of action, units deployed to a CTC at the end of a period of collective training but prior to assuming a deployable status. Such units would undoubtedly know a CTC rotation to be in their future and even be able to predict the likely dates with some degree of accuracy. But as the CTC rotation would serve as a capstone deployment exercise as well as an operational exercise, the Army could wait until the last minute to announce the location of the rotation. Assuming the Objective Force lives up to the deployability criteria in the *ATCP*, units rotating to the CTCs would receive only 96 hours of advance notice.

But how was this different from any other option in which Objective Force units meet the *ATCP* deployability criteria? The answer lies in the unique training sequence of this course of action. In the three previous courses of action, and in current practice, a CTC rotation could fall anywhere in a unit's training cycle, rarely if ever occurring at the height of a unit's deployment readiness. As a result, units required extensive advance coordination to prepare for a CTC deployment. In this fourth course of action, units rotating to a CTC always did so at the conclusion of their deployment and readiness training periods, making the advance coordination unnecessary.<sup>63</sup> This represented a major change to current practice.

Similarly, this course of action called for extensive change in the adaptability of the opponent at the CTCs. This option scored HIGH in the use of an adaptive opponent by tying the CTC OPFOR to the most likely contingencies facing the unit during its deployment window. Starting with the contemporary operating environment as a base line, this course of action required the OPFOR to rapidly adapt to the changing world environment to replicate emerging potential opponents in doctrine, organization, and equipment. In other words, this course of action replaced a single but flexible imaginary opponent with a series of potential real-world opponents. Again, this represented a significant departure from current thinking.

Scores in the remaining evaluation criteria proved to be much less radical departures from current practice. This option earned a score of HIGH in rapid transitions on the assumption that stability and support operations would be integrated into rotations when such operations were considered likely contingencies during the training unit's deployment window. The score of MEDIUM in *ad hoc* organizations reflected the assumption that Objective Force brigades would deploy to the CTC with their habitual task organization plus whatever augmentation deemed most likely given the contingencies anticipated in the upcoming deployment window. Neither of these assumptions differed greatly from current practice or trends at the CTCs.

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<sup>63</sup> This logic is predicated on the assumption of major changes to the Army's readiness system such that only a portion of Army units would be within their deployment window at any given time.

Collectively, these scores indicated that an expeditionary model for training at the CTCs offered a solution which would serve well to prepare Objective Force units for the deployability requirements, the need for rapid transitions, and the adaptive opponent anticipated by the *ATCP*. Significant problems remained in training the Objective Force to cope with the *ad hoc* organizations predicted in the *ATCP*, primarily stemming from the lack of joint forces integration in this option. Despite its considerable strengths, this course of action fell short of a magic bullet for the CTCs.

## COMPARISON

In fact, none of the courses of action considered in this study provided a stand-alone solution to the problem of preparing the CTCs for the Objective Force. Each offered improvement in one or more areas, but failed to meet all the requirements identified at the beginning of the study. An examination of the various evaluation criteria demonstrates a need for a combined solution.

Of the options considered, only the expeditionary model provided a CTC training experience designed to prepare the Objective Force to meet the deployability requirements of the *ATCP*. The other three models failed to address the significant advance coordination required for a CTC rotation, and therefore failed to place rotating units in a training situation that would allow them to practice the short-notice deployments envisioned for the Objective Force. Considering the vital role of rapid deployability in the underlying rationale of the Objective Force, any solution that failed to address this issue could only be seen as significantly flawed.

Unfortunately, the expeditionary model did not match its success in training rapid deployment with similar success in training *ad hoc* organizations. Only the joint training center model provided sufficient contact with forces outside the unit's habitual relationships to effectively replicate the *ad hoc* nature of the future envisioned in the *ATCP*. With "all operations are joint" becoming an accepted article of faith in both joint and Army doctrine, any solution which failed to replicate such an environment also represented a significant flaw.

In other words, the two leading candidates as acceptable solutions, the joint training center model and the expeditionary model, each contained at least one failure to address a major aspect of the training requirements of the Objective Force. The other two options, the expanded mission set model and the expanded charter model, offered only modest improvements over current practice, and failed to address critical aspects of Objective Force training. The study failed to identify a single option which would satisfy the training requirements of the Army envisioned in the *ATCP*.

## **CONCLUSION**

A full analysis of the courses of action identified in Chapter Three proved all four to fall short of a satisfactory solution to meeting the CTC training requirements of the Objective Force. But two courses of action, the joint training center model and the expeditionary model, did provide tantalizing glimpses of partial solutions to the problem. By combining the best aspects of these two options, the study hoped to produce a vision for the CTCs of 2020 which would meet the needs of the Objective Force. The results of that combination are discussed in Chapter 5.

## CHAPTER FIVE

### RECOMMENDATIONS

*The brigade commander paused a moment to collect his thoughts. His head still spun from his short encounter with the State Department representatives who appeared to have been awaiting his arrival when his vehicle rolled off the airplane in the middle of Louisiana. Nothing in the deployment order mentioned the presence of State Department people in his area of operations, but they seemed all too aware of his imminent arrival, and had a prepared list of things they needed immediately. He had written down their concerns, asked for their assessment of the situation, and then turned them over to the brigade executive officer. Now he wanted to get a clear picture of the brigade.*

*The situation screen in his vehicle showed that the first battalion had established itself in a security posture around the airfield at Alexandria and was in the process of conducting a relief-in-place with the Marine battalion who had originally secured the area. The Marines had spoiled an attempted terrorist attack earlier in the day, and now the relief was going slower than anticipated. Elements of the second battalion, reinforced with several civil affairs assets, were miles to the west, attempting to make contact with a Special Forces team who had established a relationship with one of the indigenous groups which seemed to be a source of political unrest in the area. Almost as far to the southwest, the third battalion and the brigade reconnaissance squadron were establishing themselves to begin offensive operations against insurgent forces intermingled with the civilian population within an established area of operations. From his vehicle, the brigade commander could see the remainder of the brigade flowing into the airfield.*

*Less than a week earlier, his brigade had been completing the last of its pre-deployment cycle training. They anticipated a CTC rotation, but couldn't be sure of the exact date or the specific CTC until they received the alert order that started the deployment process. Ninety-six hours*

*later, the brigade was conducting defensive operations in Alexandria, urban offensive operations in Fort Polk, and stability operations in Peason Ridge.*

*The brigade executive officer called on the radio to notify the commander that the JTF headquarters had directed a shortened timeline for the relief of the Marines. Apparently events elsewhere in the theater demanded their presence. The commander acknowledged the message, then asked the executive officer to query the JTF for the specific reason behind the change. If something was going on in the theater, it would be best to know about it. His mind wandered temporarily to the group of non-governmental organization representatives who had gathered around the brigade civil-military operations officer a short distance from his vehicle.*

*As if to demonstrate the wisdom of the request for additional information, two minutes later the brigade commander received a FRAGO from the JTF headquarters. Air elements had identified a significant force of armored vehicles moving from the south, but it was unclear who the unit belonged to or what it might be attempting to accomplish. The brigade should make contact to determine the allegiance and intentions of the unit; if it proved hostile, the brigade was to destroy it south of PL MIAMI. The brigade should also make contact with a representative of the local government to determine if they knew anything about the armored vehicles. In a surprising change of fortune, the brigade would receive the Marine battalion OPCON for the next twenty-four hours. As the commander contemplated this sudden change in the situation, another radio net came alive with the warning of an inbound theater ballistic missile. With a bit of a start, the commander realized he was sitting at the anticipated impact point.*

## **INTRODUCTION**

The scenario described above is not a prediction of the future of the CTCs. Predictions are risky propositions in the best of cases, and require a level of confidence bordering on rashness in the environment of change that characterizes the modern world. Instead, the scenario above forecasts what a CTC rotation *might* look like in 2020, if the Army is serious about producing the



forces described in the *ATCP*. Its most important message is simply this: to be of value to the Objective Force, the CTCs will require considerable change in several areas.

This study considered four broad courses of action for transforming the CTCs, using evaluation criteria derived from the *ATCP* and *TRADOC Pamphlet 525-3-90/O&O*. The courses of action reflected options already considered by the CTCs themselves or offered in professional journals, books, or other publications. The study concluded that none of the courses of action met all the requirements of the *ATCP*, but that each offered some training advantage to the Objective Force. An optimal course of action, such as that depicted in the scenario above, would incorporate elements of at least three of the four courses of action.

Such a course of action would include changes in the CTC training scenario, training method, and training sequence. This is not particularly surprising, for to some extent a change in any one of these areas necessitates a modification in the others. Changes in the training method in order to meet the training requirements of the Objective Force for rapid deployment necessitate changes in the training sequence as well, as it seems unlikely that all the brigades of the Objective Force will be ready to deploy in 96 hours at all times. Changes in the training method likewise suggest the necessity of changes to the training scenario. The results of this interaction are described below in the form of five specific recommendations for the training method, training sequence, and training scenario of the CTCs of 2020.

## **GETTING THERE: TRAINING METHOD**

1. **The CTCs should modify their training method to focus on the rapid deployment of the training unit directly into the training environment.** In the best case, units of the Objective Force would be actively participating in their rotational training 96 hours after being notified of their up-coming CTC rotation, reflecting the deployment standard identified in the *ATCP*. This means that the administrative overhead of a CTC rotation (pre-rotation coordination meetings, equipment draw, unit briefings, etc.) must be drastically reduced or transferred from the

training unit to a higher headquarters. It also means that the O/C package must, as a rule, join the training unit at home station and observe the entire deployment sequence. Unless the CTCs start to move in this direction in the near future, it may well prove that a 96-hour deployment sequence is within the capabilities of the Objective Force but outside the capabilities of the CTCs.

**2. CTC rotations should take place as part of a larger joint exercise, even if the rest of the exercise involves only virtual or constructive simulations.** The requirement to increase the degree of joint participation in Army training seems self-evident, given the ubiquitous presence in both Army and joint publications of phrases emphatically stating that future operations will be joint in nature. Although there remains some disagreement over the lowest echelon at which joint training should occur, recent operational experience in Afghanistan and elsewhere would seem to indicate that the brigades of the Objective Force will face the problems inherent in *ad hoc* joint organizations, and the CTCs offer the best opportunity to provide the necessary practice. To achieve this practice, however, the CTCs need to provide more than an Army organization attempting to mimic a joint task force headquarters. All of the issues springing from the employment of rapidly changing *ad hoc* joint organizations are best replicated by actually bringing the services together in training, even if only a portion of the Army units involved are conducting live training. A CTC experience for the Objective Force should be essentially a joint experience.

## **GETTING THERE: TRAINING SEQUENCE**

**3. Units should rotate to a CTC just prior to assuming a deployable status, following a period of progressive training.** As the CTCs adapt to the rapid deployment training requirements of the Objective Force, the current practice of placing a CTC rotation essentially anywhere on a unit's training calendar will prove unfeasible. It seems extremely unlikely, if not impossible, that all of the brigades of the Objective Force will remain on a 96-hour alert status indefinitely; a rotational cycle seems both more likely and more rational. CTC rotations must,

therefore, coincide with a unit's assumption of a fully deployable status, or else the rotational unit will not be able to deploy on the 96-hour timeline indicated in the *ATCP*. A CTC rotation should, in other words, serve as the "shakedown cruise" for Objective Force units.

## **GETTING THERE: TRAINING SCENARIO**

**4. CTCs rotations should fully integrate stability and support operations into each rotation.** The adoption of full spectrum dominance as a central concept in both Army and joint thinking leads to the unavoidable conclusion that the CTCs must be able to provide realistic training in all four types of operations, a conclusion only strengthened by the history of the Army over the past ten years. To be fully optimized for the Objective Force, each of the CTCs must have the ability to replicate offensive, defensive, stability, and support operations, or else the various CTCs must be linked in such a way as to produce this ability collectively.<sup>64</sup> To meet the requirements for full spectrum operations, a CTC rotation for an Objective Force unit will require the unit to transition rapidly from stability and support operations to offensive and defensive operations and vice versa.

**5. CTCs should be flexible enough to rapidly modify their OPFOR to replicate emerging threats in anticipated contingencies.** While the contemporary operating environment model of the OPFOR currently in use at the CTCs undoubtedly provides an adaptive and aggressive opponent, the changes in the CTCs indicated above almost demand that the CTCs have the ability to replicate real world threats on demand. An Objective Force unit preparing to assume a deployable status and using its CTC rotation as a capstone training event will be best served by a CTC that can replicate those contingencies which seem most likely during the deployment window of the rotational unit. It may be that no specific contingency looms on the

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<sup>64</sup> The CTC Master Plan states that "the Army cannot afford a total full-spectrum focus at each CTC," and attempts to overcome this limitation by assigning specific roles to each of the CTCs (page 1-7). This approach is unnecessarily confused by the Master Plan's treatment of stability and support operations as a stand-alone category of operations, separate and distinct from small scale contingencies, major regional conflicts, and major theaters of war.

horizon, and the imaginary enemy posed by the contemporary operating environment model serves as satisfactory training aid in preparing the rotational unit to face an adaptive and aggressive enemy of unknown origin. At times, however, specific contingencies *will* be in the forefront of unit planning and home station training, and the CTCs must be adaptive enough to allow that training focus to continue. Imagine a unit, fully aware of a high probability of a deployment to a specific region to counter a specific foe, spending the last days of its redeployment training fighting an imaginary enemy that may or may not bear any resemblance to the real threat. Certainly, the Objective Force requires better, and the CTCs of 2020 should deliver it.

## **CONCLUSION**

It is difficult to deny the prominent role the CTCs have played in preparing the Army of the past twenty years. As this study has shown, however, without significant changes in how the CTCs do business it is also difficult to see how they will continue to play the same role for the Objective Force. The necessary changes in training method, training sequence, and training scenario exceed such cosmetic modifications as enlarging the training area or building more extensive urban training complexes. Even if the Objective Force were not the Army's goal, the needs of the contemporary Army would lead to larger CTCs and more urban terrain. But the requirements of the Objective Force take the CTCs down a road of more radical change in which rapid deployment, joint operations, some type of unit training cycle, stability and support operations, and a rapidly tailorable OPFOR play a prominent role. Fortunately, there is time for the CTCs to incorporate the necessary changes incrementally and rationally. The brigade commander of the opening scenario is today a lieutenant in the legacy force. If the CTCs are to be prepared for him and his Objective Force brigade, they must start preparing now.

## BIBLIOGRAPHY

- Avolio, Bruce J. "Winning With a Full Range of Leadership." *Military Review*, (March-April, 2001): 55-57.
- Bertha, Lieutenant Colonel Ronald L. "Battle Command: Replicating the NTC Experience." *Military Review*, (November-December, 2000): 9-16.
- Bertha, Lieutenant Colonel Ronald L. "The Future of the Combat Training Centers to Meet the National Military Strategy." Thesis, United States Army War College, 1999.
- Buning, Major Tom. "Dynamic Improvements at the National Training Center." *Engineer*, (August, 1995): 36-38.
- Chapman, Anne W. *The Army's Training Revolution, 1973-1990: An Overview*. Fort Monroe, Virginia: Office of the Command Historian, United States Army Training and Doctrine Command, 1994.
- Chapman, Anne W. *The National Training Center Matures, 1985-1993*. Fort Monroe, Virginia: Office of the Command Historian, United States Army Training and Doctrine Command, 1997.
- Chapman, Anne W. *The Origins and Development of the National Training Center, 1976-1884*. Fort Monroe, Virginia: Office of the Command Historian, United States Army Training and Doctrine Command, 1992.
- Ennis, Colonel Charles W. and Major Michael T. Mahoney. "Integrating Force Projection into NTC Rotations." *Military Review*, (September-October, 1996): 10-15.
- Herbert, Colonel Paul, Colonel Gary Swartz, Lieutenant Colonel Doug Blake, Lieutenant Colonel Bruce Brant, Lieutenant Colonel George C. Harris, Lieutenant Colonel Lyle D. Hohnstine, Lieutenant Colonel John Rosenberger and Lieutenant Colonel Glenn Webster. "Combat Training Centers: The Twenty-first Century Schools for the Application of Military Arts and Science." Thesis, United States Army War College, 1995.
- Hertling, Mark P. and James Boisselle. "Coming of Age in the Desert: The NTC at Twenty." *Military Review*, (September-October, 2001): 64-71.
- Kaufman, Gail, and Amy Svitak. "Transforming Training: DoD Creates Requirements, Acquisition Strategies." *Defense News*, (1-7 July, 2002):1.
- Kernan, William F. "General Kernan and Major General Cash Discuss Millennium Challenge's Lessons Learned." *DoD News* (17 September, 2002) [Available on the internet at [http://www.defenselink.mil/news/Sep2002/t09172002\\_t917millchall.html](http://www.defenselink.mil/news/Sep2002/t09172002_t917millchall.html), assessed 31 January, 2003].
- McGraw, Lieutenant Colonel Donald C. "The CMTC: Remaining Relevant Today, Preparing for Tomorrow." *Field Artillery*, (March-April, 2000): 19-21.

- Nagl, Major John A. and Cadet Elizabeth O. Young. "Si Vis Pacem, Para Pacem: Training for Humanitarian Emergencies." *Military Review*, (March-April, 2000): 31-37.
- Ohle, Major David H. and Major John M. Spiszer. "Providing Coherence for Training Force XXI." *Military Review*, (July-August, 1996): 63-69.
- Rosenberger, Colonel John D. "Reversing the Downward Spiral of Combat Readiness: Change the Way We Measure It." *Military Review*, (November-December, 1999): 54-59.
- Taylor, First Lieutenant N. Van. "Why the Marine Corps Needs the NTC." *Marine Corps Gazette*, (June, 1999): 49-50.
- Thurman, Brigadier General James D. "Military Training Capabilities/Shortfalls." Statement to U.S. House of Representatives Armed Services Committee, 8 March, 2002.
- Tomko, Captain T. Shane. "The JRTC Experience." *Marine Corps Gazette*, (March, 2001): 52-56.
- U.S. Army. *Army Regulation 350-50: Combat Training Center Program* Washington, D.C.: Headquarters, Department of the Army, 24 May, 1995.
- U.S. Army. *Army Transformation Wargame 2001: Reference Volume*. [Compact Disc] Washington, D.C.: Headquarters, Department of the Army, 2001.
- U.S. Army. *Combat Training Center Master Plan – FY 04-09*. Washington, D.C.: Headquarters, Department of the Army, 13 June, 2002.
- U.S. Army. *Combat Training Center Master Plan – FY 05-09 (Final Approved Draft)*. Washington, D.C.: Headquarters, Department of the Army, 12 February, 2002.
- U.S. Army. *Field Manual 3-0, Operations*. Washington, D.C.: Headquarters, Department of the Army, 2001.
- U.S. Army. *Field Manual 7-0, Training the Force*. Washington, D.C.: Headquarters, Department of the Army, 2002.
- U.S. Army. *Field Manual 7-100.2 Opposing Force Tactics – Draft*. Washington, D.C.: Headquarters, Department of the Army, 24 August, 2001.
- U.S. Army. *Field Manual 25-101, Battle Focused Training*. Washington, D.C.: Headquarters, Department of the Army, 1990.
- U.S. Army. *TRADOC Pamphlet 525-3-90/O&O: The United States Army Objective Force Operational and Organizational Plan for the Maneuver Unit of Action*. Fort Monroe, Virginia: Headquarters, Training and Doctrine Command, 22 July, 2002.
- U.S. Army. *United States Army Transformation Campaign Plan*. Washington, D.C.: Headquarters, Department of the Army, 2001.
- U.S. Department of Defense. *Joint Capstone Concept: Full Spectrum Dominance Through Joint Integration, Version 4.0 (Predecisional Draft)*. Washington, D.C.: Headquarters, The Joint Staff, 22 January, 2003.

- U.S. General Accounting Office. National Security and International Affairs Division. *Military Readiness: Full Training Benefits From Army's Combat Training Centers Are Not Being Realized*. Washington, D.C., 1999.
- U.S. Joint Forces Command. *Joint National Training Capability Report*. Norfolk, Virginia: Headquarters, U.S. Joint Forces Command, March, 2002.
- Vandergriff, Donald. *The Path to Victory: America's Army and the Revolution in Human Affairs*. Novato, California: Presidio Press, 2002.